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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,514	11/30/2000	Young Joon Song	K-241	8909
7590		12/03/2004	EXAMINER	
Fleshner & Kim, LLP		LEVITAN, DMITRY		
14500 Avion Parkway		ART UNIT		
Suite 125		PAPER NUMBER		
Chantilly, VA 20151		2662		

DATE MAILED: 12/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/725,514

**Applicant(s)**

SONG, YOUNG JOON

**Examiner**

Dmitry Levitan

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37 is/are allowed.
- 6) ☒ Claim(s) 1-3, 9-12, 14-23, 36 and 38-42 is/are rejected.
- 7) ☒ Claim(s) 4-8, 13 and 24-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4 and 6.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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Applicant's amendment, filed 8/20/02, has been entered. Claims 1-42 remain pending.

***Drawings***

1. Figures 1, 2 and 3a should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
2. The drawings are objected to because of a typographical error on Fig. 3a: codes for H3,1 and H3,5 are identical. H3,5 code should read as 01011010.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because Performance results, shown on Fig. 4-7 and 9-13, are not supported by the description as it is unclear where and how the word error rate was measured.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: DPDCH on Fig. 1. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified

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and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

4. The disclosure is objected to, because abbreviations or acronyms DPCH, AWGN, Eb/No are cited throughout the specification without explanation. Applicant should provide a full explanation for the acronyms at least at their first occurrence in the specification.

5. The disclosure is objected to because of the following informalities:

Control channel on Fig. 1 is disclosed as DPCCH on page 2 and DPCH on page 13.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 38 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 38 limitation “depending on the number of active cells in the active set” is unclear, because this limitation could be interpreted as related to the allocating cell ID codes or to the selection of the codes(Hadamard or bi-orthogonal).

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

9. Claims 1-3, 9-12, 14-23, 36 and 38-42 are rejected under 35 U.S.C. 102(a) as being anticipated by TSG-RAN XP-002213881, Optimum ID codes for SSDT, Nov 30, 1999.

10. Regarding claims 1-3, 10-12, 14, TSG-RAN teaches a method for allocating cell ID codes in a cellular system (introduction, page 1) comprising:

Generating ID codes using punctured Hadamard codes (proposed Hadamard ID codes, page 4 and puncturing bits as shown in tables 3 and 4), and

Allocating the generated ID codes to cells which require ID codes (introduction, page 1).

In addition, regarding claim 10, TSG-RAN teaches the proposed ID codes on Table 3 as “medium”, before puncturing the first bit.

In addition, regarding claim 38, Examiner interpreted dependency on the number of active cells as related to the assigning the cell ID codes.

11. Regarding claim 9, TSG-RAN teaches a method for allocating cell ID codes using selected Hadamard codes with bit length of 8 or 16 (proposed ID codes on page 4 of length 8 and 16).

12. Regarding claims 15-17, 36, TSG-RAN teaches a method for generating and transmitting cell ID codes comprising:

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generating at a UE, cell ID codes based on Hadamard codes during SSDT (giving temporary ID during SSDT on page 1, Introduction),

allocating cell ID codes to active cells of the UE (active set on page 16, General),

periodically measuring at the UE, received levels of common pilots transmitted from the active cells to the primary cell (inherently part of SSDT process, because SSDT includes periodic measurements of the received pilot signals), and

periodically transmitting cell ID codes of the selected primary cell to the active cells (temporary cell identification on page 16, Definition of temporary cell identification, inherently releasing the ID codes when SSDT released, as codes are temporary).

13. Regarding claims 18 and 19, TSG-RAN teaches a method including deleting first bits of Hadamard codes and inserting cell IDs into FBI field by one or two bits (tables 3 and 4).

14. Regarding claims 20-23, TSG-RAN teaches a method including transmitting the cell ID codes by one frame (sending ID within a frame on page 17), puncturing first and second bits for 8 and 16 bits codes (as shown in tables 3 and 4).

15. Regarding claims 39-42, TSG-RAN teaches a method for identifying a cell in a radio communication system according to tables 3 and 4, identical to the tables of claims 39-42.

#### ***Allowable Subject Matter***

16. Claim 37 is allowed.

17. Claims 4-8, 13, 24-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Persson	US 20030013447A1	Mobile assisted handover using CDMA.
Naor	US006236861B1	Method for tracking mobile users.
Dent	US006215762B1	Communication system and method with orthogonal block encoding.
Asokan	US006456646B1	Methods and systems for detecting codewords with inter symbol interference.
Jedwab	US006373859B1	Method and apparatus for encoding and decoding data.
Minn	US006088347A	Variable chip rate CDMA.
Dent	US005353352A	Multiple access coding for radio communications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

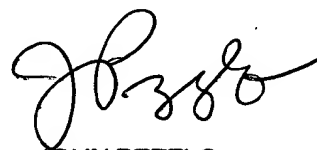
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dmitry Levitan  
Patent Examiner  
11/30/04



**JOHN PEZZLO**  
**PRIMARY EXAMINER**